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			U.S. PATENT DOCUMENT	S	
Examiner nitials*			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
FA	A	5,012,200	Melnzer	04-30-1991	
1	В	5,862,460	Rich	01-19-1999	
	С	5,903,854	Abe et al.	05-11-1999	
	0	6,330,455	Ichihara	12-11-2001	
	E	5,302,914	Amtz et al.	04-12-1994	
	F	6,285,251	Dent et al.	09-04-2001	
	G	5,694,093	DaSilva et al.	12-02-1997	
	Н	5,854,571	Pinckley et al.	12-29-1998	
	1	5,872,481	Sevic et al.	02-16-1999	
	J	6,133,788	Dent	10-17-2000	
	K	6,201,452	Dent et al.	03-13-2001	
	ξA	5,345,189	Hornak et al.	09-06-1994	
	М	5,264,807	Okubo et al.	11-23-1993	
	N	5,909,643	Alhara	06-01-1999	
	0	5,929,702	Myers et al.	09-27-1999	
	Р	5,929,702 6,758,269 ^A	Wu	05-26-1998	
	Q	5,786,727	Sigmon	07-28-1998	
	R	5,886,575	Long	03-23-1999	
V	s	5,880,633	Leizerovich et al.	03-09-1999	
FA	Т	5,739,723	Sigmon et al.	04-14-1998	1

				FOR	EIGN PATENT DOCUM	MENTS		
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Examiner Initials*	Cite No. 1	Office ³	Number ⁴ (if t	d Code⁵ (nown)	Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	T°
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Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (MPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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			· ·	I.S. PATENT DOCUMENTS	S	
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F	Α	V	5,872,481	Sevic et al.	02-16-1999	
. 1		w	5,661,434	Brozovich et al.	08-26-1997	
		x	5,420,541	Upton et al.	05-30-1995	
		Υ	5,568,094	Bowen et al.	10-22-1996	
		z	5,548,246	Tamamoto et al.	08-20-1996	
		AA	5,541,554	Stengel et al.	07-30-1996	
		AB	5,724,005	Chen et al.	03-03-1998	
		AC	4,439,744	Kumar et al.	03-27-1984	
		AD	5,621,351	Puri et al.	04-15-1997	
		AE	4,433,312	Kahn	02-21-1984	
		AF	5,974,041	Komfeld et al.	10-26-1999	
		AG	3,777,275	Cox	12-04-1973	
		AH	6,587,511	Barak et al.	07-01-2003	
		ΑI	5,901,346	Stengel et al	05-04-1999	
		AJ	2003/0125065	Hasson et al.	07-03-2003	
		AK	6,825,719	Barak et al.	11-30-2004	
		AL	10/131,750	Barak et al.	04-24-2002 (filing date)	
		AM	5,786,728	Alinikula	07-28-1998	
		AN	6,633,199	Nielsen et al.	10-14-2003	
Δ	/	AO	6,147,653	Wallace et al.	11-14-2000	
	<u> </u>	AP	5,295,162	Zarembowitch	03-15-1994	
	Zλ	AQ	6,271,782	Steensgaard-Madsen	08-07-2001	

				FOR	EIGN PATENT DOCUM	IENTS		
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QIPE Under the Page 2005 Complete if Known Substitute for form 1449B/PTO 10/734,117 **Application Number** INFORMATION DISCLOSURE Filing Date **December 15, 2003** STATEMENT BY APPLICANT **First Named Inventor** YELLIN, Daniel **Group Art Unit** 2817 (use as many sheets as necessary) **Examiner Name** Not yet known Sheet 3 4 Attorney Docket Number P-6063-US of

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
FA AR		FREDRICK H. RAAB, "Efficiency of Outphasing RF Power-Amplifier Systems", IEEE Transactions on	
	ļ	Communications. Vol. Com-33, No. 10, Oct 1985, pp. 1094-1099	
	AS	STEVE C. CRIPPS, "RF Power Amplifiers for Wireless Communications", 1999, USA, pp. 219-250	
	AT	D.C. Cox, "Linear Amplification with Nonlinear Components", IEEE Transaction on Communications,	
		December 1974, pp.1942-1945.	
,	AU	Bob Stengel and William R. Eisenstadt, "LINC Power Amplifier Combiner Method Efficiency	
		Optimization", IEEE Transaction on Vehicular Technology. Vol.49, No. 1, January 2000, pp.229-234	١
	AV	Bob Stengel, "LINC Linear Transmitter Technology Review", Presented at International Microwave Symposium, Boston, MA, June 11, 2000, pp.1-32.	
	AW	S.A. HETZEL et al., "A LINC Transmitter", University of Bristol, IEEE, 1999, pp. 133-137	
	AX	S. O. Ampem-Darko, H.S. Al-Raweshidy, "A Novel Technique for Gain/Phase Error Cancellation in LINC	Ċ
V		Transmitters", 1999 IEEE , pp. 2034-2038	
FA	AY	T. A. D. Riley and M. A. Copeland, "A simplified continuous phase modulator technique," IEEE Trans. on	
		circuits and systems, VOL. 41, NO. 5, pp. 321-328, May 1994.	

Examiner Signature	/Freshteh Aghdam/	Date Considered	02/05/2007
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^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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			NON PATENT LITERATURE DOCUMENTS				
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		AZ	N. M. Filiol, T. A. D. Riley, C. Plett and M. A. Copeland, "An agile ISM band frequency synthesizer with built-in GMSK data modulation," IEEE Journal of Solid-State Circuits, VOL. 33, NO. 7, pp.998-1008, July 1998.				
		ВА	T. Yamaji, A. Yasuda, H. Tanimoto, Y. Suzuki, "A Digital-to-RF Converter Architecture Suitable for a Digital-to-RF Direct-Conversion Software Defined Radio Transmitter", IEICE Trans. Commun., vol. E83-B, No. 6, pp. 1254-1260, June 2000.				
	-	вв	J. Nieznanski, "Performance characterization of vector sigma-delta modulation", IECON '98, Proceedings of the 24th Annual Conference of the IEEE, vol. 1, pp. 531-536, 1998				
	-	вс	ZHANG et al., "Multibit Oversampled Sigma - Delta A/D Convertor with Nonuniform Quantisation", ELECTRONICS LETTERS, 14 MARCH 1991, UK, Vol. 27, No. 6, pp. 528-529				
	/	BD	D.L. Neuhoff, "Polar quantization revisited", IEEE International Symposium on Information Theory, 1997 Proceedings, pp. 60, 1997				
F	'A	BE	N.O. Sokal, "RF Power Amplifiers, Classes A through S – How they operate, and when to use 29/4031/2 € textronics Industries Forum of New England, Professional Program Proceedings, pp. 179-183, 1997				
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Examiner /Freshteh Aghdam/ Signature	Date Considered	. 02/05/2007
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^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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PTO/SB/08A (10-96) Approved for use through 10/31/99, OMB 0651-0031

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FA	В	Perrott et al., "A 27-MW CMOS Fractional-N Synthesizer Using Digital Compensation for 2.5-MB/S GFSK	
FA		Modulation*, IEEE Journal of Solid-State Circuits, IEEE Inc., New York, USA, Vol. 32, No. 12, December 1, 1997,	
		pp. 2048-2080	\perp
FA	С	M.H. Perrott, "Techniques for High Data Rate modulation and Low Power Operation of Fractional-N Frequency	
FA		Synthesizers", PH.D Disseration, MiT, September 1997, Retrieved from the Internet,	
FA		URL:http://www-mtl.mit.edu/{perrott/pages/thesis.pdf/, pp. 1-90	
· FA	D	International Search Report from PCT/US2004/010959, mailed on October 7, 2004	
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		NON PATENT LITERATURE DOCUMENTS		
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FA	В	MICHAEL H. PERROTT ET AL., "A Modeling Approach for Σ-Δ Fractional-W Frequency Synthesizers Allowing		
	Straightforward Noise Analysis", IEEE Journal of Solid-State Circuits, Vol. 37, No. 8, August 2002, pp. 1028-1038			
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